**NEW MEXICO**

**ENVIRONMENT DEPARTMENT**

Ground Water Quality Bureau

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***Draft Date: March 19, 2021***

**GROUND WATER QUALITY BUREAU**
**DISCHARGE PERMIT – RENEWAL AND MODIFICATION**
**Issued under 20.6.2 NMAC**

| | |
|---|---|
| **Facility Name:** | Biad Chili LTD Co. |
| **Discharge Permit No:** | DP-423 |
| **Permittee Name:** | Don R. Biad |
| **Mailing Address:** | 2240 – A, Pepper Road<br>Las Cruces, NM 88007 |
| **Facility Location:** | 8927 N. Hwy 185<br>Section 31, T21S, R01E and Section 6, T22S, R01E |
| **County:** | Dona Ana |
| **Permitting Action:** | Renewal and Modification |
| **Source Classification:** | Agriculture - Crop |
| **Permit Issuance Date:** | DATE |
| **Permit Expiration Date:** | DATE |
| **NMED Permit Contact:** | Steve Perez |
| Telephone Number/Email: | (505) 490-3393/Steve.Perez@state.nm.us |

**MICHELLE HUNTER**
**Chief, Ground Water Quality Bureau**
**New Mexico Environment Department**

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## PART A GENERAL INFORMATION

### A100 Introduction

A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), **DP-423,** to Biad Chili LTD Co. (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Ground and Surface Water Protection Regulations, 20.6.2 NMAC. NMED's purpose in issuing this Discharge Permit is to control the discharge of water contaminants from the Biad Chili LTD Co. (Facility) for the protection of groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.

B. The Permittee is discharging up to 130,000 gallons per day (gpd) of effluent from the Biad Chili LTD Co. This discharge or leachate may move directly or indirectly into groundwater of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of Subsection A of 20.6.2.3101 NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant.

C. In issuing this Discharge Permit, NMED has determined that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. Pursuant to Section 20.6.2.3104 NMAC, it is the Permittee's responsibility to comply with the terms and conditions of this Discharge Permit; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

### A101 Terms of Permit Issuance

A. **Permit Duration** - Pursuant to WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of a Discharge Permit shall be for the fixed term of **five years** from the effective date of the Discharge Permit. Modification to an existing Discharge Permit does not change these terms.

B. **Permit Modification** - represented herein consists of a change in the location of the discharge which includes part of the existing surface disposal area (Tract 6, and the southern ends of Tract 9, and Tract 10) located in Section 6, T22S, R01E.

C. **Permit Fees** – Payment of permit fees is due at the time of Discharge Permit approval. Permit fees shall be paid in a single payment or shall be paid in equal installments on a yearly basis over the term of the Discharge Permit. Single payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date. Initial installment payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date; subsequent installment payments shall be remitted to NMED no later than the anniversary of the Discharge Permit effective date. Permit fees are associated with issuance of this Discharge Permit. Nothing in this Discharge Permit relieves the Permittee of the obligation to pay all permit fees assessed by NMED. A permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees

assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date. [Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]

D. **Permit Renewal** - To renew this Discharge Permit, the Permittee shall submit, in accordance with Section G of 20.6.2 NMAC, an application and any associated fees for renewal, renewal and modification, or renewal for closure at least 120 days before the discharge permit expiration date, unless closure of the facility is approved by NMED before that date.

E. **Transfer of Ownership** - This Discharge Permit is being issued to Biad Chili LTD Co. as identified in **Section A100** above. In accordance with Section 20.6.2.3111 NMAC, the Permittee, any listed owner(s) of record, and any [other] holder(s) of an expired discharge permit are responsible for complying with the conditions listed herein. If during the duration of this Discharge Permit a change in the list of responsible persons is required, transfer of ownership shall be completed in accordance with Section 20.6.2.3111(A).

## A102 Applicable Regulations

A. **Scope** - This Discharge Permit applies solely for the regulation of process wastewater or stormwater generated from facility operations and does not include regulation of domestic wastewater at the facility. Domestic wastewater generated at the facility is treated or disposed of pursuant to 20.7.3 NMAC.

B. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

C. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC unless otherwise specified in this Discharge Permit.

D. Complying with the applicable requirements of 20.6.2 NMAC does not relieve a facility's owner, operator or Permittee from complying with the requirements of other applicable local, state and federal regulations or laws.

## A103 Facility: Physical Description

A. This facility is located at 8927 N. Hwy 185, approximately four miles south of Radium Springs, in Section 31, Township 21S, Range 1E, and Section 6, Township 22S, Range 1E, in Dona Ana County.

B. This facility is comprised of the following wastewater system components as identified in the application dated June 18, 2020 and the administrative record which includes the original Discharge Permit issued on August 15, 1986 and subsequently modified on July 8, 1987, March 1, 1989, renewed on May 2, 1994, and on August 11, 2000, renewed and modified on December 1, 2005, renewed on November 23, 2015, and amended on December 9, 2016, as of the effective date of this Discharge Permit:

1. Fields or tracts within the surface disposal area:
    a. **Tract 1** – 24.7 acres, located at the northwest corner of the facility. Tract 1 has been actively receiving wastewater by flood irrigation since approximately August 15, 1986.
    b. **Tract 2** – 2.3 acres, located at the northeast corner of the facility. Tract 2 has been actively receiving wastewater by flood irrigation since approximately August 15, 1986.
    c. **Tract 3** – 4.8 acres, located west and adjacent to the processing building. Tract 3 has been actively receiving wastewater by flood irrigation since approximately August 15, 1986.
    d. **Tract 4** – 10.2 acres, located south of the processing building and east and adjacent to Tract 1. Tract 4 has been actively receiving wastewater by flood irrigation since approximately August 15, 1986.
    e. **Tract 5** – 4.6 acres, located south of and adjacent to Tract 4. Tract 5 has actively been receiving wastewater by flood irrigation since approximately August 15, 1986.
    f. **Tract 6** – 11.0 acres, located south of and adjacent to Tract 5. Tract 6 has been actively receiving wastewater by flood irrigation since approximately August 15, 1986.
    g. **Tract 7** – 17.3 acres, located west of and adjacent to Tract 6. Tract 7 has been actively receiving wastewater by flood irrigation since approximately December 1, 2005.
    h. **Tract 8** – 10.0 acres, located south and adjacent to Tract 7. Tract 8 has been actively receiving wastewater by flood irrigation since approximately December 1, 2005.
    i. **Tract 9** – 6.6 acres, located south and adjacent to Tract 8. Tract 9 has been actively receiving wastewater by flood irrigation since approximately December 1, 2005.
    j. **Tract 10** – 15.9 acres, located south and adjacent to Tract 6. Tract 10 has been actively receiving wastewater by flood irrigation since approximately December 1, 2005.
    k. **Tract 11** – 17.4 acres, located south and adjacent to Tract 9 and Tract 10. Tract 11 has been actively receiving wastewater by flood irrigation since approximately December 1, 2005.

These system components identified are potential sources of groundwater contamination. **Section B100** lists all wastewater system components authorized to discharge under this Discharge Permit.

**A104 <u>Facility: Documented Hydrogeologic Conditions</u>**

A. Groundwater most likely to be affected at this facility is at a depth of approximately 9-12 feet and had a total dissolved solids concentration of 2,120 milligrams per liter.

B. Data collected from on-site monitoring wells document groundwater contamination attributed to one or more wastewater system components at this facility. Groundwater quality standards for total dissolved solids (TDS), chloride (Cl), and nitrate (NO3) have been exceeded according to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC.

## PART B FACILITY SPECIFIC REQUIREMENTS

### B100 Facility: Authorized Discharge

A. Within 180 days following the effective date of this Discharge Permit (**by DATE**), the Permittee shall submit an up-to-date diagram of the layout of entire facility to NMED. The diagram shall include the following elements:

- north arrow
- effective date of the diagram
- overall facility layout
- sumps
- solids separators/settling basins
- irrigation water mix tanks
- zones within the surface disposal area with identification and acreage labeled
- groundwater monitoring wells
- irrigation wells
- meters measuring wastewater discharges to the sump
- meters measuring wastewater applied to the surface disposal area
- wastewater distribution pipelines
- each ditch irrigation system, acequia, irrigation canal and drain
- backflow prevention methods or devices
- wastewater sampling locations
- septic tanks and leachfields

Any element that cannot shown due to its location inside of existing structures, or because it is buried without surface identification, shall be on the diagram in a schematic format and identified as such. [Subsection C of 20.6.2.3106 NMAC, Subsection A of 20.6.2.3107 NMAC]

B. NMED authorizes the Permittee to discharge water contaminants as part of facility operations subject to the following requirements:

1. The Permittee is authorized to discharge up to 130,000 gpd of wastewater from the production area. Process wastewater and equipment wash water collects into a concrete gutter system and flows into a primary concrete collection basin. From the primary collection basin, the effluent is pumped into a hydrosifter for solids removal. Wastewater discharges into the secondary containment basin and then pumped via 4" PVC to a concrete lined irrigation canal and discharged to up to 124.8 acres for surface disposal.

   The surface disposal area is comprised of 57 .6 acres of fallow fields divided into 6 tracts at the facility and 67.2 acres of pecan grove divided into 5 tracts owned by Thomas Chavez. The discharge occurs for approximately 6 months each year (July through December). The fallow fields are later cultivated with crops. Solids generated by chili processing are stored at the facility prior to disposal offsite in accordance with all local, state, and federal regulations.

2. NMED authorizes the Permittee to apply wastewater to fields within the surface disposal area in accordance with Subsection C of 20.6.2.3109 NMAC. The land application area is comprised of the following fields for a total land application area of 124.8 acres.

   a. **Tract 1** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   b. **Tract 2** – was authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   c. **Tract 3** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   d. **Tract 4** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   e. **Tract 5** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   f. **Tract 6** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   g. **Tract 7** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   h. **Tract 8** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   a. **Tract 9** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   b. **Tract 10** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

   c. **Tract 11** – authorized by the last Discharge Permit, dated November 23, 2015, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.

C. This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges, such as spills or leaks must be reported to NMED in a corrective action conducted pursuant to Section 20.6.2.1203 NMAC.

**B101 <u>Facility: Existing System Controls</u>**

A. The following existing system controls at this facility shall be required as described below:

1. **Flow Meter** - The facility measures the volume of (1) wastewater discharged from the production area:
   a. **Supply Meter (Master Meter S/N 8108067)**– located north of the processing building to measure the volume of all fresh water contributing to the wastewater discharged to the surface disposal areas; providing an estimate of the volume of wastewater generated from the chili processing.
2. **Monitoring Wells** - The facility uses the following monitoring wells to supply data representative of groundwater quality [Subsection A of 20.6.2.3107 NMAC]. The facility is adjacent to the Rio Grande, the groundwater gradient is seasonal.
   a. **MW-1** – hydrologically upgradient of all contamination sources at the facility and located at the northwest corner of the facility, at the northwest corner of Tract 1.
   b. **MW-2** – hydrologically downgradient of part of the surface disposal area and located at the southeast corner of Tract 6. MW-2 is dry and has not been used to provide data for several years.
   c. **MW-3** – hydrologically downgradient of part of the surface disposal area and located in at the southwest corner of Tract 6.
   d. **MW-4** – hydrologically upgradient of the facility and located at the northeast corner of the facility at the northeast corner of Tract 2. MW-4 is inactive and not required for sampling and monitoring.
   e. **MW-5** – hydrologically downgradient of the surface disposal area and located at the southern point of the facility, at the southeast corner of Tract 11.

**B102 Facility: Conditions for Operation**

A. NMED has reviewed the permit application for the proposed new facility and has determined that the provisions of the applicable groundwater quality standards will be met in accordance with this Discharge Permit. General conditions for all Discharge Permits issued by the Ground Water Quality Bureau pursuant to NMAC 20.6.2 are summarized on **Table B1**. Unless otherwise specified in Parts A or B of this Discharge Permit, both the general conditions for a facility discharge permit (as listed in this part) and facility-specific conditions as listed are mandated to assure continued compliance.

**Table B1**
**General Discharge Permit Conditions:**

| Engineering and Surveying |
|---|
| a) None required. |

**Table B1**
**General Discharge Permit Conditions:**

| **Operations and Maintenance** |
|---|
| b) Operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated.<br>c) Repair or replace compromised pipe(s) or fixture(s) within 72 hours of discovery. |
| **Inspection and Monitoring** |
| d) Visually inspect all facility pipes and fixtures on a weekly basis for evidence of leaks or failure. [20.6.2.3107 NMAC] |
| **Recordkeeping and Reporting** |
| e) Maintain written records at the facility of any inspection(s), repairs and maintenance conducted on facility infrastructure as related the wastewater management system.<br>f) Conduct the monitoring, reporting, and other requirements in accordance with the monitoring requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]<br>g) Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC<br>h) Unless otherwise identified in this Discharge Permit, submit quarterly monitoring reports to NMED annually by May 1st according to the following quarterly schedule: [Subsection A of 20.6.2.3107 NMAC]<br>• January 1 through March 31 (first quarter)<br>• April 1 through June 30 (second quarter)<br>• July 1 through September 30 (third quarter)<br>• October 1 through December 31 (fourth quarter)<br>i) Retain required records for a minimum period of 10 years from the date of any sample collection, measurement, report or application in accordance with 20.6.2.3107 NMAC, 74-6-5 WQA. |

B. **<u>Surface Disposal</u> <u>Area Management</u> -** The Permittee shall manage all land application areas at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B3** below.

**Table B3**
**Surface Disposal Area Management**

| **Engineering and Surveying** |
|---|
| a) Any irrigation or supply wells located within the land application area shall have a surface pad constructed in accordance with the recommendations of Subsection G of 19.27.4.29 NMAC and a permanent well cap or cover pursuant to Subsection I of 19.27.4.29 NMAC. |
| **Operations and Maintenance All Land Application Areas** |

**Table B3**
**Surface Disposal Area Management**

b) The Permittee shall discharge wastewater to each tract within the surface disposal area such that the amount of total nitrogen discharged does not exceed 200 pounds per acre in any 12-month period. Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. Wastewater shall be distributed evenly throughout the entire disposal area. Excessive ponding shall be prevented.

**Inspection and Monitoring All Land Application Areas**

c) The Permittee shall visually inspect the concrete-lined ditch system or PVC piping on a monthly basis to ensure proper maintenance. Any damage to a lined ditch or PVC piping shall be repaired within 30 days of discovery. The Permittee shall document all inspection findings and repairs made in a log kept on-site that is available to NMED upon request.

d) The Permittee shall maintain 18-inch to 24-inch berms around the surface disposal area to prevent surface water run-on and run-off. The berms shall be inspected on a regular basis and after any major precipitation event, and repaired as soon as possible following discovery of the damage.

e) Perform routine soil sampling in each tract within the surface disposal area and Report analytical results and provide a map depicting the soil sampling locations within each tract annually to NMED as part of the **Annual Monitoring Report** due **May 1**. Composite soil samples shall be collected after the processing season has concluded for all tracts regardless of whether the tract is cropped, remains fallow, or has received wastewater. One surface composite soil sample (first-foot) and two sub-surface composite soil samples (second-foot and third-foot) shall be collected from each tract. Composite soil samples shall be collected and analyzed according to the following procedure:

- Each surface and sub-surface soil sample shall consist of a single composite of 15 soil cores collected randomly throughout each tract. Should a tract consist of different soil textures (i.e., sandy and silty clay), a composite soil sample shall be collected from each soil texture within each tract.
- Surface soil samples (first-foot) shall be collected from a depth of 0 to 12 inches.
- Each second-foot sub-surface soil sample shall be collected from a depth of 12 to 24 inches.
- Each third-foot sub-surface soil sample shall be collected from a depth of 24 to 36 inches.
- Each surface and sub-surface composite sample shall be analyzed for pH, TKN, NO3-N, and determination of the sodium adsorption ratio (SAR).
- Soil samples shall be analyzed in accordance with the analytical methodology required by this Discharge Permit. Soil pH shall be analyzed using a saturated paste extract. Soil NO3-N shall be analyzed by a 2 molar KCl extract.

**Recordkeeping and Reporting All Land Application Areas**

f) The Permittee shall complete Surface Disposal Data Sheets (SDDS; copy enclosed) on a monthly basis that document the amount of nitrogen applied to [each tract within] the surface disposal area during the most recent 12 months. The SDDS shall reflect the total nitrogen concentration from the most recent wastewater analysis and the measured discharge volumes to [each tract within] the surface disposal area for each month. The SDDS shall be completed with information above or shall include

**Table B3**
**Surface Disposal Area Management**

| |
|---|
| a statement that wastewater disposal did not occur. The SDDS shall be submitted to NMED in the **Annual Monitoring Report.** |

C. **Solids Management -** The Permittee shall mange all solids at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B4** below.

**Table B4**
**Solids Management**

| |
|---|
| **Engineering and Surveying** |
| a) None required. |
| **Operations and Maintenance** |
| b) The Permittee shall store and remove solids separated from the wastewater in a manner and frequency necessary to prevent the contamination of groundwater. Solids collected by the hydrosifter and removed from the collection basins shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. **Disposal of solids on the surface disposal area is prohibited.** Prior to off-site disposal, any solids stored at the facility shall be managed to minimize the generation and infiltration of leachate by diverting stormwater run-on and run-off and by preventing the ponding of water within solids stockpiling. |
| **Inspection and Monitoring** |
| c) The Permittee shall inspect the collection basins on a quarterly basis and clean as needed to prevent pump failure. The Permittee shall maintain a record of sump inspections, repairs and cleanings. Solids generated in the processing area shall be stored and transported off-site in accordance with the conditions of this Discharge Permit. |
| **Recordkeeping and Reporting** |
| d) The Permittee shall, at all times, have the log of sump inspections, repairs, and cleanings available for NMED review. |

D. **Flow Meters** – Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the Permittee shall employ a flow metering system that uses flow measurement devices (flow meters) to measure the volume(s) of 1) wastewater discharged from the production area and 2) wastewater transferred and land applied at the facility. All flow meters employed at the facility shall be managed in accordance with the conditions listed in **Table B5** below.

**Table B5**
**Flow Meters**

| |
|---|
| **Engineering and Surveying** |
| a) None required. |
| **Operations and Maintenance** |
| b) All flow meters shall be calibrated in accordance with the manufacturer's requirements prior to installation or reinstallation following repair. |

**Table B5**
**Flow Meters**

| **Inspection and Monitoring** |
|---|
| c) Using the supply meter installed on the fresh water supply line, measure the volume of all sources contributing to the wastewater discharged to the secondary containment basin authorized to contain wastewater. Readings from the flow meter on water supply line is used to estimate wastewater volumes discharged to the secondary containment basin without adjustments or deductions to the meter readings. The monthly meter readings, estimated monthly and average daily discharge volumes, and notes (i.e a clear designation of the well, the date of the meter reading, a decimal point in the number, and the units of the number) shall be submitted to NMED in the Annual Monitoring Report (due by **May 1st**) each year. |
| d) The Permittee shall measure the monthly volume discharged to each tract within the surface disposal area using the fresh water supply meter. The Permittee shall maintain a log that records the date that discharges occur to each tract, monthly totalizing meter readings and units of measurement. The log shall be used to calculate the total monthly volume of wastewater discharged to each tract. The monthly volume discharged to each tract shall be used on the SDDS to calculate nitrogen loading. A copy of the log shall be submitted to NMED in the Annual Monitoring Report (due by **May 1ST** each year]. |
| e) Visually inspect flow meters on a weekly basis for evidence of malfunction. If a visual inspection indicates a flow meter is not functioning to measure flow, the Permittee shall initiate repair or replacement of the meter within 30 days of discovery. |
| **Recordkeeping and Reporting** |
| f) Maintain copies of the manufacturer's certificate of calibration and the manufacturer's recommended maintenance schedule at the facility. |
| g) Record of meter readings at intervals not to exceed monthly. The average daily discharge volume for each recording interval shall be calculated by dividing the difference between the meter readings by the number of days between meter readings. |
| h) Record meter readings (without adjustments or deductions) and submit in the **Annual Monitoring Report**. Include the date, time and units of each measurement, and calculations for the average daily volumes of wastewater discharged from the processing area, reported in gallons per day. |
| i) For meters requiring repair, submit a report to NMED on the quarter following the repair that includes a description of the malfunction, a statement verifying the repair, and a copy of the manufacturer's or repairer's certificate of calibration. |
| j) For meters requiring replacement, submit a report to NMED on the quarter following the replacement that includes plans for the device, a copy of the manufacturer's certificate of calibration, and a copy of the manufacturer's recommended maintenance schedule. |
| k) The Permittee shall maintain a log of repairs. The log shall be available, at all times, for NMED inspection. |

E. **Monitoring Wells** - Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the Permittee is required to install monitoring wells at appropriate depths and locations to monitor groundwater quality. The approved groundwater monitoring well system at the facility is detailed in **Table B6** below.

**Table B6**
**Groundwater Monitoring Wells**

| **Engineering and Surveying** |
|---|
| a) None |
| **Operations and Maintenance** |
| b) Operate and maintain the following facility groundwater monitoring well(s): **MW-1, MW-2, MW-3, MW-4, MW-5**. |
| **Inspection and Monitoring** |
| c) Perform quarterly groundwater sampling for all facility monitoring wells as identified in Section B101 A.3 and analyze the samples for dissolved TKN, NO3-N, TDS and Cl. Groundwater sample collection, preservation, transport and analysis shall be performed according to the following procedure:<br>• Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest hundredth of a foot.<br>• Purge three well volumes of water from the well prior to sample collection.<br>• Obtain samples from the well for analysis.<br>• Properly prepare, preserve and transport samples.<br>• Analyze samples in accordance with the methods authorized in this Discharge Permit.<br><br>Depth-to-most-shallow groundwater measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED in the Annual Monitoring Report.<br>c) The Permittee shall develop a groundwater elevation contour map on a quarterly basis using the top of casing elevation data from the monitoring well survey and quarterly depth-to-most-shallow groundwater measurements obtained from the groundwater monitoring wells required by this Discharge Permit.<br><br>The groundwater elevation contour map shall depict the groundwater flow direction based on the groundwater elevation contours. Groundwater elevations between monitoring well locations shall be estimated using common interpolation methods. A contour interval appropriate to the data shall be used, but in no case shall the interval be greater than two feet. Groundwater elevation contour maps shall depict the groundwater flow direction, using arrows, based on the orientation of the groundwater elevation contours, and the location and identification of each monitoring well and contaminant source. The groundwater elevation contour maps shall be submitted to NMED in the Annual Monitoring Report.<br>d) Prior to the expiration date of this Discharge Permit, NMED shall have the option to perform one downhole inspection of each monitoring well identified in this Discharge Permit. NMED shall establish the inspection date and provide at least 60 days' notice to the Permittee by certified mail. The Permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of any sediment agitated as a result of pump removal. |
| **Recordkeeping and Reporting** |

**Table B6**
**Groundwater Monitoring Wells**

e) An **Annual Monitoring Report** shall be filed with NMED in accordance with the general reporting schedule listed in **Table C1**. Each **Annual Monitoring Report** shall contain, at a minimum, the following information:

- Facility map with location and number of each well in relation to the contamination source it is intended to monitor
- Depth-to-shallowest groundwater measurements
- Field parameter measurements and parameter stabilization log
- Analytical results (including the laboratory quality assurance and quality control summary report)
- Groundwater elevation contour maps utilizing elevation contours of 2 ft or less

**B103 Facility: Conditions for Closure**

A. Upon closure of the facility, the Permittee shall perform the following closure measures:

B. Within 90 days of the effective date of this Discharge Permit (by **DATE**), the Permittee shall properly plug and abandon the following well(s) previously used for monitoring in accordance with Sections 20.6.2.3109 NMAC and 20.6.2.3107 NMAC.

1. **MW-2**, located at the southeast corner of Tract 6.

Well[s] shall be plugged and abandoned in pursuant to 19.27.4 NMAC and in accordance with NMED's *Monitoring Well Construction and Abandonment Guidelines* and any other applicable local, state, and federal regulations. Documentation describing the plug and abandonment procedures, including photographic documentation, shall be presented in a **Well Abandonment Report**. The **Well Abandonment Report** shall be submitted to NMED within 60 days of completion of well plugging activities.

C. For permanent closure, the following closure actions shall be completed upon permanent cessation of wastewater discharge:

1. Notify NMED of closure plans within 30 days of cessation.
2. Provide NMED with a **Disposal Plan** for closure activities: Implement **Disposal Plan** upon NMED approval.
3. Remove all solids from surface areas.
4. Empty all facility sumps/collection basins of wastewater within 6 months of cessation.
5. Complete removal of solids from wastewater collection basins within 2 years of cessation.
6. Dispose all wastes according the approved **Disposal Plan**.

7. Following completion of the closure activities above, continue groundwater monitoring as required by this Discharge Permit for two years to confirm the absence of groundwater contamination. If monitoring results show that the groundwater standards in Section 20.6.2.3103 NMAC are being violated, the Permittee shall implement the contingency plan required by this Discharge Permit.
8. Following notification from NMED that post-closure monitoring may cease, the Permittee shall plug and abandon the monitoring well(s) in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011.
9. When all closure and post-closure requirements have been met, the Permittee may request to terminate the Discharge Permit [20.6.2.3109 NMAC, 20.6.2.3107. NMAC].

**B104 Facility: Contingency Plan**

A. In the event NMED or the Permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the Permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].

B. Facility conditions that will invariably require Permittee action under one or more contingency plans include:

1. **Exceedance of groundwater quality standards** – In the event that groundwater monitoring indicates that a groundwater quality standard identified in Section 20.6.2.3103 NMAC is exceeded; the total nitrogen concentration in groundwater is greater than 10 mg/L; or a toxic pollutant (defined in Subsection WW of 20.6.2.7 NMAC) is present in a groundwater sample and in any subsequent groundwater sample collected from a monitoring well required by this Discharge Permit, the Permittee shall enact the following contingency plan:

   Within 60 days of the subsequent sample analysis date, the Permittee shall propose measures to ensure that the exceedance of the standard or the presence of a toxic pollutant will be mitigated by submitting a corrective action plan to NMED for approval. The corrective action plan shall include a description of the proposed actions to control the source and an associated completion schedule. The plan shall be enacted as approved by NMED.

   Once invoked (whether during the term of this Discharge Permit; or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements), this condition shall apply until the Permittee has fulfilled the requirements of this condition and groundwater monitoring confirms for a minimum of two years of consecutive groundwater sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded and toxic pollutants are not present in groundwater.

2. **Ineffective groundwater monitoring well(s)** – In the event that information available to NMED indicates that a well(s) is not constructed in a manner consistent with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and*

*Abandonment Conditions, Revision 1.1, March 2011*; contains insufficient water to effectively monitor groundwater quality; or is improperly located the Permittee shall install a replacement well(s) and shall survey the replacement monitoring well(s) within 120 days following notification from NMED.

Replacement well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011. The Permittee shall submit construction and lithologic logs, survey data and a groundwater elevation contour map to NMED within 60 days following well completion.

Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. Well plugging, abandonment and documentation of the abandonment procedures shall be completed in accordance with the attachment titled Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011, and all applicable local, state, and federal regulations. The well abandonment documentation shall be submitted to NMED within 60 days of completion of well plugging activities.

3. **Exceedance(s) of permitted maximum daily discharge volume** - The maximum daily discharge volume authorized by this Discharge Permit is exceeded by more than ten percent for any four average daily discharge volumes within any 12-week period the Permittee shall submit a corrective action plan to reduce the discharge volume for NMED approval.

4. **Exceedance(s) of Nitrogen Loading Limits** - In the event that the SDDS show that the amount of nitrogen in wastewater applied to [any zone within] the surface disposal area in any 12-month period exceeds 200 pounds per acre, the Permittee shall propose the reduction of nitrogen loading to the surface disposal area by submitting a corrective action plan to NMED for approval. The plan shall include a schedule for completion of corrective actions and shall be submitted within 90 days following the end of the monitoring period in which the exceedance occurred. The Permittee shall initiate implementation of the plan following approval by NMED.

5. **Insufficient impoundment capacity** - A survey, capacity calculations, or settled solids thickness measurements indicate an existing impoundment is not capable of meeting the capacity the Permittee shall submit a corrective action plan for NMED approval.

   The plan may include, but is not limited to, proposals for constructing an additional impoundment, reducing the discharge volume, removing accumulated solids, changing wastewater management practices, or installing an advanced treatment system. The corrective action plan shall include a schedule for implementation through completion of corrective actions. The corrective action plan schedule shall propose completion not to exceed one year from the submittal date of the initial corrective action plan. The Permittee shall initiate implementation of the plan following approval by NMED. Should the corrective action plan include removal of accumulated solids, solids shall be removed from the impoundment in a manner that is protective of the impoundment liner. The plan shall include the method of removal, and locations and methods for storage and disposal (or land application, if authorized) of the solids.

6. **Spills, leaks, unauthorized discharge** – Any spill or release that is not authorized under this Discharge Permit. the Permittee shall comply with the requirements of Sections 20.6.2.1203 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.2.1203 NMAC.

C. The Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmation of groundwater contamination.

## PART C GENERAL TERMS AND CONDITIONS

### C100 Legal

A. Nothing in this Discharge Permit in any way, relieves the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders [20.6.2 NMAC].

B. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality, and NMED may require more stringent actions to protect groundwater quality. NMED may require the Permittee to implement abatement of water pollution and remediate groundwater quality.

C. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to $15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the 20.6.2 NMAC, or this Discharge Permit, and civil penalties of up to $10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]

D. Pursuant to WQA 74-6-10.2(A-F), NMED may assess criminal penalties for any person who knowingly violates or knowingly causes or allows another person to:

1. Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;
2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.

E. The Permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice in accordance with 20.6.2.3111 NMAC, prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof. The transferee(s) shall notify NMED, in writing, of the date of transfer of ownership and provide contact information for the new owner(s) pursuant to Subsection B of 20.6.2.3111 NMAC. Submit to NMED notification of the transfer within 30 days of the ownership transfer date. [20.6.2.3111 NMAC]

F. Pursuant to WQA 74-6-5(o), the Permittee has a right to appeal the conditions and requirements as outlined in this Discharge Permit through filing a petition for review before the WQCC. Such petition shall be in writing to the WQCC within thirty (30) days of the receipt of this Discharge Permit. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review.

**C101 General Inspection and Entry Requirements**

A. Nothing in this Discharge Permit limits in any way, the inspection and entry authority of NMED under the WQA, 20.6.2 NMAC, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]

B. The Permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]:

1. Enter at regular business hours or at other reasonable times upon the Permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

**C102 General Record Keeping and Reporting Requirements**

A. The Permittee shall maintain a written record of the following:

1. Amount of wastewater, effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]
2. Operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; to measure flow rates, to monitor water quality, or to collect other data required by this Discharge Permit. Per Section A of 20.6.2.3107 NMAC, this record shall include:
   a. Repair, replacement or calibration of any monitoring equipment
   b. Repair or replacement of any equipment used in the Permittee's waste or wastewater treatment and disposal system.
3. Any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]

B. The Permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:

1. The dates, exact place and times of sampling or field measurements;
2. The name and job title of the individuals who performed each sample collection or field measurement;
3. The date of the analysis of each sample;
4. The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample;
5. The analytical technique or method used to analyze each sample or take each field measurement;
6. The results of each analysis or field measurement, including raw data;
7. The results of any split sampling, spikes or repeat sampling; and
8. A description of the quality assurance (QA) and quality control (QC) procedures used.

C. The Permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The Permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]

**C103 Modifications and/or Amendments**

A. The Permittee shall notify NMED of any changes to the Permittee's wastewater treatment and disposal system, including any changes in the wastewater flow rate or the volume of wastewater storage, or of any other changes to operations or processes that would result in any significant change in the discharge of water contaminants. The Permittee shall obtain NMED's approval, as a modification to this Discharge Permit pursuant to Subsections E, F, or G of 20.6.2.3109 NMAC, prior to any increase in the quantity discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit [20.6.2.3107.C NMAC].

B. The Permittee shall file plans and specifications with NMED for the construction of a wastewater system and for proposed changes that will change substantially the quantity or quality of the discharge from the system. The Permittee shall file plans and specifications prior to the commencement of construction. Changes to the wastewater system having a minor effect on the character of the discharge shall be reported as of January 1 and June 30 of each year to NMED. [20.6.2.1202 NMAC]

## Part D MISCELLANEOUS

### D100 Acronyms

| | |
|---|---|
| CL | chloride |
| CQA | construction quality assurance |
| CQC | construction quality control |
| DP | discharge permit |
| FEMA | Federal Emergency Management Administration |
| FIRM | flood insurance rate map |
| gpd | gallon per day |
| LADS | land application data sheet(s) |
| mg/L | milligram per liter |
| mL | milliliters |
| NMAC | New Mexico Administrative Code |
| NMED | New Mexico Environment Department |
| NMSA | New Mexico Statutes Annotated |
| $NO_3$-N | nitrate as nitrogen |
| SDDS | surface disposal data sheet(s) |
| TDS | total dissolved solids |
| TKN | total Kjeldahl nitrogen |
| WQA | New Mexico Water Quality Act |
| WQCC | Water Quality Control Commission |